

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Group Art Unit: 3664

MATTHEW D. WHITTON

Examiner: Jen, Mingjen

Serial No.: 10/808,081

Confirmation No.: 5371

Filed: March 24, 2004

For: AUTOMATIC TRANSMISSION CLUTCH TIMING OPTIMIZATION
APPARATUS AND METHOD

Attorney Docket No.: GP-303000 / GM0453PUS

ARGUMENTS IN SUPPORT OF THE PRE-APPEAL BRIEF
REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant respectfully asserts that a variety of clear errors have been made in the Examiner's final rejections under 35 U.S.C. § 103(a) as set forth in detail in the Final Office Action mailed October 28, 2008. Applicant believes that the claims in the present application are in condition for allowance, and respectfully requests review of the Examiner's position relative to this 35 U.S.C. § 103(a) rejection, prior to Applicant's filing of a formal Appeal Brief.

Remarks, beginning on page 2;

Petition for One Month Extension of Time, is submitted herewith;

Notice of Appeal, is submitted herewith; and

Pre-Appeal Brief Request for Review, is submitted herewith.

REMARKS

Claims 1-11 are pending. Claims 1 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Minowa et al. (6,243,637) in view of Narita (5,241,477). Claims 2-5 and 7-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Minowa et al. in view of Narita and Vilim et al. (5,745,382). No amendments have been made to the claims.

Independent Claim 1 requires (in part, with emphasis added):

determining the first derivative with respect to time
of at least a portion of the off-going clutch pressure
command; and
determining when the on-coming clutch gained
torque capacity using the first derivative.

The examiner has not shown that these elements are taught anywhere in the prior art. The Examiner admits that “Minowa et al does not show determining when the clutch gained torque capacity using the first derivative with respect to time.” Final Office Action mailed October 28, 2008, page 3. The Examiner states that “Narita et al shows when the clutch gained torque capacity using the first derivative (Fig 11, Col 3, lines 60- Col 4, lines 25; Col 9, lines 53-64); the first derivative with respect to time (Col 7, lines 5-10 where the data points are plotted with respect to recorded time; Col 2, lines 14-15).” Office Action mailed April 7, 2008, page 3.

The specific areas of the Narita and Minowa patents to which the Examiner has pointed do not disclose the above elements and limitations, nor does Applicant find the above claim elements elsewhere in Narita or Minowa. For an itemized review of the portions of the prior art cited by the Examiner, see Applicant’s Response filed July 7, 2008, last paragraph of page 3 to first paragraph of page 6.

In the Advisory Action mailed December 11, 2008, first paragraph, the Examiner states:

“Minowa et al provides a known device and method, off going clutch, on going clutch and clutch generated pressure command; Narita provides known method, first derivative technique, which also exhibited on Minowa et al, Fig 11, 50 where it is obvious for one of ordinary skill in the art to provide a known technique/method, that provided by Narita, to a known device/method of Minowa et al ready for improvement to yield predictable results.”

Minowa shows that shifts may involve engaging and disengaging clutches and Narita discloses using “the first time derivative of gear ratio.” (Narita, column 9, lines 58-64, emphasis added.) Narita and Minowa do not disclose determining a first derivative with respect to time of the off-going clutch pressure command or using that derivative to determine when the on-coming clutch gained capacity. The Examiner masks the omissions of the prior art by stating conclusory motivations for combining the prior art references without addressing the fact that the prior does not contain the elements to be combined.

According to the Examiner, the existence of a “first derivative technique” renders obvious any determination of the first derivative of any variable in relation to a known component or structure. Therefore, because Narita discloses “the first time derivative of gear ratio,” Applicant’s use of “the first derivative with respect to time ... of the off-going clutch pressure command,” is rendered obvious under the Examiner’s view.

Furthermore, according to the Examiner, the existence of the “first derivative technique” renders obvious any application of the determined first derivative of any variable to any method, method step, or structure associated therewith. Again, because Narita discloses “the first time derivative of gear ratio,” the Examiner finds it obvious to determine “when the on-coming clutch gained torque capacity using the first derivative.” is rendered obvious.

The Examiner’s obviousness analysis renders obvious any future use of differential calculus applied to any variable; and further renders obvious the use of any such determined derivative in relation to any known structure, regardless of the use.

Claims 6 and 11 contain similar elements and limitations – determining the first derivative with respect to time of off-going clutch pressure command and using that derivative of off-going clutch pressure command to determine when the on-coming clutch gained torque capacity. Accordingly, the analysis presented for Claim 1 also applies to Claims 6 and 11. Therefore, the rejection of Claims 6 and 11 is also improper. All other claims depend from Claims 1 and 6, and the rejections thereof are similarly improper for at least this reason.

Further reasons for the impropriety of the rejections of Claims 1-11 are present. However, because the rejections are clearly improper for the reasons provided above, further analysis is not necessary at this time.

The Examiner erred in setting forth the scope and content of the prior art, and has thus erred in setting forth the differences between the prior art and the claimed invention. The Examiner has therefore omitted multiple essential elements needed for a *prima facie* rejection.

CONCLUSION

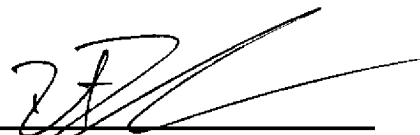
The final rejections under 35 U.S.C. § 103(a), as set forth in detail in the Final Office Action mailed October 28, 2008, have not satisfied the requirements for a *prima facie* rejection. Based on the above summary and the correspondence of record, Applicant believes that the claims in the present application are in condition for allowance, and respectfully requests review of the Examiner's position relative to this 35 U.S.C. § 103(a) rejection, prior to Applicant's filing of a formal Appeal Brief.

Please charge any unpaid fees associated with this amendment to deposit account 07-0960.

Respectfully submitted,

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By


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Date:

2/17/09

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